

# InLCA – Final Agenda

## International Conference & Exhibition on Life Cycle Assessment: Tools for Sustainability

April 25 - 27, 2000, Hyatt Regency Crystal City, Arlington, Virginia

Sponsored by:

U.S. Environmental Protection Agency Office of Research and Development  
and  
The Institute for Environmental Research and Education

**Day 1: Tuesday 25 April 2000**

**Opening Plenary – Moderator: Mary Ann Curran, US EPA/NRMRL**

Plenary speakers provided broad-based views on achieving goals of sustainability, the major challenges and opportunities we face, and what government and private industry can do to better integrate environmental decision-making with a life-cycle basis.

9:00 AM Norine Noonan, EPA Office of Research & Development  
9:15 AM Anders Wijkman, European Union Parliament  
10:00 AM Bas de Leeuw, United Nations Environment Programme  
11:00 AM Marc Epstein, Rice University  
11:45 AM Open Discussion

**Session I: Global Views of LCA – Moderator: Mary Ann Curran, US EPA/NRMRL**

1:30 PM Rethinking LCA – Joel Ann Todd, The Scientific Consulting Group, Inc.  
2:00 PM LCA in Industry & Business – Adoption Patterns, Applications and Implications in Selected European Countries – Paolo Frankl, University of Rome  
2:30 PM Inventory of Automobiles – Ron Williams, General Motors Corp.  
3:30 PM Indicators of Sustainability – Dan Fiorino, EPA Office of Policy, Economics and Innovation  
4:00 PM LCA and Global Climate Change – Solving the Measurement Puzzle – Kevin Brady, Five Winds International  
4:30 PM Land Use Impacts: The Next Great LCA Frontier – Rita Schenck, Institute for Environmental Research and Education

**Day 2: Wednesday 26 April 2000 – Morning Sessions**

Session	Session IIA	Session IIB	Session IIC	Session IID
Topic	Pollution Prevention	Risk-Based Approaches	LCA Studies	Decision Making Approaches
Moderator	Moderator: John Shoaff, US EPA	Moderator: Jane Bare, US EPA	Moderator: James Fava, Five Winds International	Moderator: Remi Coulon, Ecobalance Inc.
8:30 AM	Identifying Mercury P2 Opportunities in the U.S. Using a Life Cycle Perspective - B. Leopold, SAIC		LCA of MD110 - A. Andrae, Ericsson Business Networks	Recovery Policy of Waste Containers - LCA Development & Application - J-S. Yang, Industrial Technology Research Institute, Taiwan
9:00 AM	Environmental Improvement of Automotive Electrical Devices by DFE Techniques based on Life Cycle Impact Assessment - F. Castells, University Rovira i Virgili, Spain	Comparison of Two Equivalency Factor Approaches with Simplified Risk Assessment for LCIA of Toxicity Impact Potential - D.A. Tolle, Battelle	The Global Production System for High-purity Silicon: LCA with a Geographical Component - E. Williams, United Nations University/Institute of Advanced Studies, Japan	A New Guide for LCA for Decision Support - G. Huppes, CML Leiden University, The Netherlands
9:30 AM	Life Cycle Management - W. White, The Traverse Group	LCA for Products with Indoor Lifetimes: Review of Methods and Issues, and Applications to Flooring Materials - G. Norris, Sylvatica	E-mail vs. Ordinary Mail: An Ecological Comparison - M. Zurkirch, Swisscom AG, Switzerland	Accounting for Engineering Trade-Offs for Decision-Making - K. Stone, US EPA
10:30 AM	Use of LCA and TCA for the Evaluation of Pollution Prevention Alternatives - K.M. Lee, Ajou University, Korea	A Risk-Based LCA Framework for Analyzing Complex Technologies - R.P. Anex, University of Oklahoma	LCA in the Service Industries: Case Study of Telecommunications - A. Horvath, University of California at Berkeley	By-Product Synergy - The Ideal Product Disposition - A. Mangan, Applied Sustainability LLC

11:00 AM	Use of Life Cycle Costing in Selecting Pollution Prevention Technologies in Navair, U.S. Navy - B. Custer, SAIC	Consequences of the Damage Approach on the Valuation Step and LCA in General - P. Hofstetter, ORISE PostDoc/US EPA	Using a Life-Cycle Approach to Achieve Sustainable Municipal Solid Waste Management Strategies in the U.S. - K. Weitz, Research Triangle Institute	Utility Based Framework for Material and Process Selection in the Integrated Chain Management of Polymers - Gary Stevens, Polymer Research Centre, UK
11:30 AM	Risk-Based Integration of Economics and Life Cycle Environment: Two Methods - G. Norris, Sylvatica	Screening and Ranking in the Context of Implicit Toxicological Concern: A Comparison of Methodologies and Requirements - D. Pennington, US EPA	LCA of Biocomposites and Impacts on Ecosystems - J. Payet, EPFL, Switzerland	Better D&D Decision-making through LCA - K.L. Yuracko, Oak Ridge National Laboratory

## Day 2: Wednesday 26 April 2000 – Afternoon Sessions

Session	Session IIIA	Session IIIB	Session IIIC	Session IIID
Topic	Management & Regulatory Issues	Data Quality and Availability	Product & Process Development & Design I	Measure of Sustainable Development & Natural Resource Use
Moderator	Moderator: Mike Levy, Environmental Strategies and Solutions	Moderator: Rita Schenck, IERE	Moderator: Bill Hanson, US EPA	Moderator: Teresa Harten, US EPA
1:30 PM	Integrated LCA and Financial Analysis of the Implications of Implementing the Proposed WEEE Directive - A. Landfield, Ecobalance, UK	Uncertainty & Sensitivities in LCA's for Waste Management Systems - M. Koller, Universitaet Pottsdam, Germany	The Use of LCA in Product Development, Elin Eriksson, Chalmers University of Technology, Sweden	The E2 Vector: A Tool to Analyze the Unlinking between Economic Growth and Environmental Load - M. Goedkoop, PRØConsultants, The Netherlands
2:00 PM	LCA and Environmental Management - T. Delaney and J. Heeren, First Environment		Integrating the Life Cycle Concept in the Product Development of Small and Medium Sized Enterprises: 2 Tools that Support this Integration - A. Vercalsteren, VITO, Belgium	Determination of Weighting Factors and its Application to the LCA of a Printed Circuit Board - K.M. Lee, Ajou University, Korea
2:30 PM	A Methodical Approach on Ecobalancing and EIA based on Material Flow Networks - A Case Study on a German Beer Brewery - J.C. Marx-G mez, Otto-von-Guericke-Universit t Magdeburg, Germany	The Other Half of the Story: The Implications of System Boundary Incompleteness for LCA Inventory Data - T. Grant, Centre for Design at RMIT University, Australia	Ensuring the Sustainability of Domestic Refrigerators - An Approach Using LCA - C. Ciantar, Bournemouth University, UK	Quantitative/Qualitative Approach towards the Assessment of Sustainable Building - K. Reiche, Technische Universit t Darmstadt, Germany
3:30 PM	3M's Life Cycle Management Process: A Practical Approach - E. Price, 3M	LCA, Data Quality & Sensitivity Analysis: The Case of Mobile Fluid Power Systems - M.C. McManus, University of Bath, UK	How to Integrate LCA into Product Development - A. Atik, Darmstadt University of Technology, Germany	Material Flow Analysis with LCA for Promoting Sustainable Industry/Community Interactions - A Practical Demonstration with Gold Mining - A. Scott, Griffith University, Australia
4:00 PM	Programmatic EHS Analyses - The Military's Approach to Environmental Life-Cycle Planning - B. Langer, SAIC	Site-Dependent LCA of Ozone Formation, Nutrient Enrichment and Acidification - J. Potting, Technical University of Denmark, Denmark		The Resource Use Management Approach: Non-Traditional Tools for LCA and Sustainability - T. Hoagland, US EPA
4:30 PM	Life Cycle Inventory of a Modern Municipal Solid Waste Landfill - R. Coulon, Ecobalance	Comparison of Different Streamlined LCA Methods for Product Design - M.D. Bovea, Universitat Jaume I, Spain	Design for the Environment Computer Display Project: Life Cycle Assessment / Cleaner Technologies Substitutes Assessment of Desktop Display Technologies - D. Singh, US EPA DfE	Life Cycle Study on Palm Oil - S. Yusoff, Universiti Malaya, Malaysia

## Day 3: Thursday 27 April 2000 – Morning Sessions

Session	Session IVA	Session IVB	Session IVC	Session IVD
Topic	Software Tools & Data Systems	Weighting & Economic Valuation	Product & Process Development & Design II	External Reporting & Communication
Moderator	Moderator: Jim Bridges, Pacific Environmental Services, Inc.	Moderator: Joyce Cooper, University of Washington	Moderator: Ed Price, 3M	Moderator: Julie Winters, US EPA
8:30 AM	BEES - Building for Environmental and Economic Sustainability: Combining Life Cycle Costing and LCA into a Practical Software Tool - B. Lippiatt, NIST	Incorporating Costs in LCA - K. Shapiro, Tellus	The Application of LCA Tools in the Measurement and Reporting of GHG Emissions - P. Bhatia, Tata Energy & Resources Institute	Using an LCI Database for Reporting and Communication - A-C. P. Isson, Chalmers University of Technology, Sweden
9:00 AM	Life Cycle Engineering: Performing LCIA and Sensitivity Analysis Using GaBi 3 - S. Spatari, PE-Americas LP	Quantitative Data Assessment for Normalization Reference - S. Suh, Centre of Environmental Science (CML), Leiden University, The Netherlands	Assessment of Materials and Process Options within Cascaded Systems: A Case Study - E. Williams, University of Surrey, UK	Comparing Eco-labeling Policies: Experimental Evidence - M.F. Teisl, University of Maine
9:30 AM	TEAM 3.0 - Tool for Environmental Analysis and Management: Managing LCA Information within an Enterprise Setting - R. Coulon, Ecobalance	The PIX Module Software: Combining LCA with Activity Based Costing for Sustained Economic Equilibrium - G. Grune, KM Limited	Application of LCA to Select Technology for Leachate Treatment - J. Kochany, Conestoga-Rovers & Associates	LCA for Environmental Product Information Schemes - P. Frankl, University of Rome, Italy
10:30 AM	Pragmatic Tools based on the Eco-Indicator 99 - M. Goedkoop, PRØConsultants, The Netherlands	Advances in Normalization & Weighting in North American LCA - G. Norris, Sylvatica	Buildings as Products: Issues and Challenges for LCA - W. Trusty, Athena Sustainable Materials Institute, Canada	Framework for Environmental Decision Making, FRED: A Tool for Environmentally Preferable Purchasing - M.A. Curran, US EPA
11:00 AM	Making LCA Data Available via the Internet: LCAccess - T. Skone, SAIC	Comparative LCA and Externality Analysis of Biodiesel & Fossil Diesel Fuel - A. Vercauteren, VITO, Belgium	Decision Support for Cleaner Technologies by Estimating Exposures to Industrial Emissions Using Modeling and GIS - J. Zhang, UCLA	LCA at the Heart of the EMS: IERE's Agricultural Community EMS Program - R. Schenck, Institute for Environmental Research and Education
11:30 AM	Development of TRACI - Tool for the Reduction and Assessment of Chemical Impacts - J. Bare, US EPA		Environmental Life Cycle Cost Analysis of Products - S. Kumaran, National University of Singapore	Material/Energy Flow Balance Analysis with LCA for a Large Metropolitan City - I. Christensen, Brisbane City Council, Australia
12:00 PM	Distributed Information System for Environmentally Conscious Process Design - Y. Fukushima, University of Tokyo, Japan	Chinese Site-Normalization References for LCIA - J. Yang, Chinese Academy of Sciences, Technical University of Denmark	An Integrated Product Life Cycle Design Tool - R. Coulon, Ecobalance	'Buying Green' through the Federal Logistics Information System - S. Harris, Defense Logistics Agency

## Day 3: Thursday 27 April 2000 – Afternoon

## Wrap-Up and Discussion on LCA Facilitators: Mary Ann Curran, EPA and Steven Rolander, SAIC

This session began with 5-minute presentations summarizing and analyzing what was presented in the 12 platform sessions.

Attendees participated in discussing the following key questions and were asked to share their views.

- What are the most promising applications of LCA and what should be done to encourage those uses?
  - What might be the least promising applications?
  - What are the most pressing needs for new or improved methods?
- Are various countries in sync or are they in very different places and what difference does that make?
  - Where does LCA go from here?